

ITS Technical Bulletin #296

ORACLE ON THE IBM OS390 MAINFRAME NEW OPERATING SYSTEM INTERFACE—OSDI

Issued: March 7, 2002
Effective: See Schedule Below
Section/Group: Database Administration
Submitted by: Mark Nielsen
Approved by: Dean Zumbunnen

Oracle databases on the IBM OS390 mainframes currently use an operating system interface referred to as MPM. Oracle Corporation has released a new interface called OSDI. OSDI has been designed to better exploit the features of the OS390 operating system.

Oracle databases on the IBM OS390 mainframes will be changed from MPM to OSDI on the dates listed below.

<u>Database</u>	<u>Listener</u>	<u>Database Name</u>	<u>CPU</u>	<u>Scheduled Date of Change</u>
ORGG	TNS2	SL Production	CPU2	March 24, 2002
	TNS3	(Listener only)	CPU3	March 24, 2002
ORRD TNS6		RF Development	CPU6	March 24, 2002
ORRA TNS6		RF Acceptance test	CPU6	March 24, 2002
ORRG TNS5		RF Production	CPU5	April 14, 2002

Databases ORDV and ORAT already use the OSDI interface. It is recommended that customers use these environments to test the required changes as listed below.

Customers will be required to make changes when the database they access is converted from MPM to OSDI. The changes are as follows:

1. The following change should be made to customer TNSNAMES files and customer ONAMES repositories:

Use keyword name SID in place of SERVICE_NAME.

2. Batch jobs, such as COBOL (compilation and execution), SQLPLUS, or SQLLDR, will need to add the following DD statements in the steps that access an Oracle database.

//ORA\$LIB DD DSN=GP.ORA.MESG.AT,DISP=SHR Acceptance test

or

//ORA\$LIB DD DSN=GP.ORA.MESG.DEV,DISP=SHR Development

or

//ORA\$LIB DD DSN=GP.ORA.MESG.PROD,DISP=SHR Production

3. Batch jobs will be required to use TSNAMES instead of accessing an ONAMES repository.
4. The Oracle listener name will change. Customer applications that use this name in their TNSNAMES files or on DD cards in their batch jobs will need to make the following change:

	<u>CPU2</u>	<u>CPU3</u>	<u>CPU4</u>	<u>CPU5</u>	<u>CPU6</u>
Old Name: TNS2	TNS3	TNS4	TNS5	TNS6	
New Name:	NET2	NET3	NET4	NET5	NET6

Note: Most batch jobs would not access the Oracle listener. Batch jobs that run on the ITSs IBM OS390 CPUs, but access an Oracle database on another CPU or platform, would access an Oracle listener. The JCL of these jobs would include a DD card that would identify the listener.

On CPU2 the DD card would currently look like this:

```
//TNS@TNS2 DD DUMMY.
```

In this example, when changing from an MPM to OSDI environment, TNS2 would be changed to NET2:

```
//TNS@NET2 DD DUMMY
```

5. SQLLDR jobs that have been run on an NT platform that load tables on an OS390 mainframe database will now have to run the SQLLDR as a batch job on the mainframe.
6. Make sure that JCL of Oracle batch jobs are using libraries associated with the database they access. The Oracle environments and the libraries that should be used in those environments are listed below.

Development environment (databases ORDV, ORRD)

GP.ORA.CMDLOAD.DEV	Command load library.
GP.ORA.MESG.DEV	Message library.
GP.ORA.H.DEV	May be used during COBOL compile.
GP.ORA.SQLLIB.DEV	May be used during COBOL compile.

GP.ORA.SRCLIB.DEV May be used during COBOL compile.

Acceptance test environment (databases ORAT, ORRA)

GP.ORA.CMDLOAD.AT Command load library.
GP.ORA.MESG.AT Message library.
GP.ORA.H.AT May be used during COBOL compile.
GP.ORA.SQLLIB.AT May be used during COBOL compile.
GP.ORA.SRCLIB.AT May be used during COBOL compile.

Production environment (databases ORGG, ORRG)

GP.ORA.CMDLOAD.PROD Command load library.
GP.ORA.MESG.PROD Message library.
GP.ORA.H.PROD May be used during COBOL compile.
GP.ORA.SQLLIB.PROD May be used during COBOL compile.
GP.ORA.SRCLIB.PROD May be used during COBOL compile

7. After the conversions of all databases to OSDI, the following files will be deleted.

GP.ORA.CMDLOAD
GP.ORA.H
GP.ORA.SQLLIB
GP.ORA.SRCLIB

Customers will need to remove the above libraries from their JCL.

Change dates and times for MPM to OSDI conversions will be documented on the ITS Change Management Schedule.

Questions or concerns regarding the scheduled changes should be directed to the ITS Database Staff. The group phone number is 538-3235. The group e-mail address is dbase@das.state.ut.us.